

ABSTRACT

A photoresist composition that employs onium salt carboxylates as thermally stable dissolution inhibitors. The photoresist composition can be either an onium carboxylate salt with a phenolic photoresist, such as novolac, or an onium cation protected carboxylate-containing resin such as an acrylic/ acrylic acid copolymer. The onium carboxylate can be an onium cholate, wherein the onium cholate is an iodonium cholate. Particularly preferred iodonium cholates are alkyloxyphenylphenyl iodonium cholates and most particularly preferred is octyloxyphenylphenyl iodonium cholate. The photoresist composition will not create nitrogen or other gaseous byproducts upon exposure to radiation, does not require water for photoactivation, has acceptable UV radiation transmission characteristics, and is thermally stable at temperatures required for solvent removal.